PARABOLAN

PRODUCT OVERVIEW

Specification	Details
Generic Name	Trenbolone Hexahydrobenzylcarbonate
Drug Class	Anabolic Androgenic Steroid (AAS)
Active Ingredient	Trenbolone Hexahydrobenzylcarbonate
Chemical Formula	$C_{29}H_{38}O_4$
Molecular Weight	450.61 g/mol
CAS Number	23454-33-3
Administration Route	Intramuscular Injection
Ester Type	Long-Acting Trenbolone Ester
Approximate Half-Life	Approximately 10–14 Days
Release Profile	Slow and Sustained Release
Bioavailability	High After Intramuscular Administration
Primary Medical Use	Testosterone Replacement Therapy in Men With Confirmed Testosterone Deficiency

INTRODUCTION

Trenbolone Hexahydrobenzylcarbonate, historically known as Parabolan, is a long-acting esterified form of trenbolone developed to provide prolonged hormone availability following intramuscular administration.Trenbolone is a synthetic anabolic androgenic steroid structurally derived from 19-nortestosterone. Additional double bonds within the steroid nucleus produce a unique pharmacological profile characterized by exceptionally strong androgen receptor affinity.The hexahydrobenzylcarbonate ester slows absorption from the intramuscular depot, resulting in gradual release of active trenbolone into systemic circulation over an extended period.Compared with Trenbolone Acetate, Trenbolone Hexahydrobenzylcarbonate provides a substantially longer pharmacokinetic profile while maintaining sustained hormone exposure.Among all trenbolone esters, Parabolan remains one of the most historically recognized pharmaceutical formulations because it was previously marketed for limited human medical use before being discontinued.

HISTORY

Trenbolone was originally developed during pharmaceutical research investigating anabolic steroid derivatives with enhanced anabolic activity.

To prolong biological activity, several esterified forms were introduced, including the hexahydrobenzylcarbonate ester.

Under the trade name Parabolan, Trenbolone Hexahydrobenzylcarbonate became one of the few trenbolone preparations previously approved for limited human therapeutic use in certain countries before eventual market withdrawal.

Although no longer widely available as a licensed pharmaceutical product, Parabolan remains an important compound in the historical development of anabolic steroid pharmacology.

Scientific investigation of trenbolone has contributed significantly to advances in:

* Androgen receptor pharmacology
* Anabolic steroid chemistry
* Protein metabolism
* Endocrine physiology

CHEMICAL STRUCTURE

Trenbolone Hexahydrobenzylcarbonate consists of the trenbolone molecule esterified with hexahydrobenzylcarbonic acid at the 17-beta hydroxyl position.

The ester significantly prolongs hormone release while preserving the biological activity of trenbolone following enzymatic hydrolysis.

The enanthate ester primarily influences:
* Absorption rate
* Release duration
* Plasma availability
* Pharmacokinetic characteristics

Following enzymatic cleavage of the ester bond, biologically active trenbolone becomes available to interact with androgen

CHEMICAL PROFILE

Parameter	Information
Chemical Name	Trenbolone Hexahydrobenzylcarbonate
Molecular Formula	$C_{29}H_{38}O_4$
Molecular Weight	450.61 g/mol
CAS Number	23454-33-3
Hormone Classification	Anabolic Androgenic Steroid
Ester Group	Hexahydrobenzylcarbonate
Active Hormone	Trenbolone

PHARMACOLOGY

Following intramuscular administration, Trenbolone Hexahydrobenzylcarbonate forms a long-lasting depot within muscle tissue.

The hexahydrobenzylcarbonate ester undergoes gradual enzymatic hydrolysis, releasing free trenbolone into systemic circulation over an extended period.

Once released, trenbolone binds with high affinity to androgen receptors located throughout multiple tissues including:

* Skeletal muscle
* Bone
* Bone marrow
* Connective tissue
* Skin
* Liver
* Reproductive tissues

Unlike testosterone, trenbolone is not considered a clinically significant substrate for aromatase and therefore does not undergo meaningful conversion to estradiol.

Conversion Pathway	Enzyme	Product
Testosterone → DHT	5-alpha reductase	Dihydrotestosterone
Testosterone → Estradiol	Aromatase	Estradiol (E2)

MECHANISM OF ACTION

Trenbolone produces its biological effects primarily through activation of intracellular androgen receptors.

The biological process includes:

* Trenbolone enters target cells.
* Trenbolone binds to androgen receptors.
* The receptor-hormone complex becomes activated.
* The activated complex translocates into the cell nucleus.
* Interaction with androgen response elements occurs on DNA.
* Gene transcription is regulated.
* Cellular protein synthesis and tissue-specific physiological responses are influenced.

Activation of androgen receptors contributes to:

* Protein synthesis
* Nitrogen retention
* Muscle tissue maintenance
* Bone remodeling
* Red blood cell production
* Connective tissue physiology
* Endocrine regulation

PHARMACODYNAMICS

Once released, trenbolone binds with high affinity to androgen receptors located throughout multiple tissues including:

SKELETAL MUSCLE SYSTEM

Trenbolone contributes to normal muscle physiology through:

* Regulation of protein metabolism
* Support of muscle tissue maintenance
* Influence on nitrogen balance
* Regulation of muscle cell function

Trenbolone exhibits a high affinity for the androgen receptor, contributing to its potent biological activity in androgen-responsive tissues.

SKELETAL SYSTEM

Trenbolone contributes to skeletal physiology by influencing:

* Bone remodeling
* Osteoblast activity
* Skeletal maintenance
* Bone mineral metabolism

HEMATOLOGICAL SYSTEM

Trenbolone influences erythropoiesis, the physiological process responsible for red blood cell production.

Physiological effects include:

* Regulation of erythropoietin activity
* Support of red blood cell formation
* Influence on oxygen transport capacity

CONNECTIVE TISSUE

Trenbolone contributes to connective tissue physiology by influencing:

* Structural protein metabolism
* Connective tissue maintenance
* Tissue remodeling
* Collagen metabolism

REPRODUCTIVE SYSTEM

Trenbolone interacts with androgen-sensitive tissues and contributes to:

* Hormonal regulation
* Maintenance of androgen-responsive tissues
* Endocrine signaling
* Reproductive physiology

PHARMACOKINETICS

Following intramuscular administration, Trenbolone Hexahydrobenzylcarbonate forms a long-lasting depot within muscle tissue.

The hexahydrobenzylcarbonate ester undergoes gradual enzymatic hydrolysis, releasing active trenbolone into systemic circulation.

Compared with Trenbolone Acetate, Trenbolone Hexahydrobenzylcarbonate provides slower hormone availability, prolonged plasma exposure, and an extended duration of biological activity.

REPRODUCTIVE SYSTEM

Testosterone is essential for normal reproductive physiology.

Functions include:

* Development of male characteristics
* Regulation of libido
* Maintenance of androgen-dependent tissues
* Hormonal balance

PHARMACOKINETIC PROFILE

Parameter	Description
Ester Type	Long-Acting Trenbolone Ester
Absorption	Slow release from intramuscular depot
Release Pattern	Sustained and prolonged release
Half-Life	Approximately 10–14 Days
Duration of Activity	Long-Acting
Plasma Stability	High
Protein Binding	High
Metabolism	Primarily hepatic
Active Hormone	Trenbolone
Elimination	Urinary excretion of metabolites

PHYSIOLOGICAL EFFECTS

Normal trenbolone activity contributes to:

Muscle Function
* Maintenance of lean body tissue
* Regulation of protein metabolism
* Support of normal muscle physiology

Bone Health
* Bone remodeling
* Mineral density maintenance
* Skeletal integrity

Metabolic Function
* Protein metabolism
* Lipid regulation
* Energy balance

Reproductive Health
* Sexual development
* Libido regulation
* Androgen-dependent functions

General Physiology
* Red blood cell production
* Hormonal balance
* Endocrine function

CLINICAL APPLICATIONS

Trenbolone Hexahydrobenzylcarbonate has previously been investigated for limited human therapeutic use and has also contributed to experimental pharmacological research.

Clinical evaluation in research settings may include:

* Medical history
* Physical examination
* Laboratory assessment
* Individual pharmacological evaluation

Investigational applications include:

* Veterinary anabolic therapy
* Protein metabolism research
* Endocrine pharmacology

SAFETY CONSIDERATIONS

Trenbolone exposure requires individualized medical evaluation and regular monitoring.

Important considerations include:

* Cardiovascular health
* Blood parameters
* Endocrine function
* Liver and kidney function
* Lipid profile
* Individual physiological response

POTENTIAL ADVERSE EFFECTS

Possible adverse effects may include:

Endocrine Effects
* Suppression of endogenous testosterone production
* Hormonal imbalance
* Alterations in endocrine function

Dermatological Effects
* Acne
* Increased skin oil production
* Hair loss in genetically predisposed individuals

Cardiovascular Effects
* Changes in lipid profile
* Increased hematocrit
* Blood pressure alterations

Reproductive Effects
* Reduced fertility
* Suppression of spermatogenesis
* Hormonal suppression

CONTRAINDICATIONS

Condition	Reason
Prostate Cancer	Potential androgen sensitivity
Male Breast Cancer	Hormone-sensitive condition
Elevated Hematocrit	Increased blood viscosity concerns
Severe Untreated Medical Conditions	Requires medical evaluation
Known Hypersensitivity	Risk of allergic reaction

DRUG INTERACTIONS

Potential interactions may occur with:

Anticoagulants
Trenbolone may influence anticoagulant response and require monitoring.

Antidiabetic Medications
Changes in glucose metabolism may alter therapeutic requirements.

Corticosteroids
Combined administration may influence fluid balance and metabolic parameters.

Other Hormonal Therapies
Combined hormonal therapy requires professional medical supervision.

LABORATORY MONITORING

Laboratory Test	Purpose
CBC	**Assess blood parameters**
Hematocrit	**Monitor red blood cell concentration**
Hemoglobin	**Evaluate erythropoiesis**
Liver Function Tests	**Assess hepatic health**
Kidney Function Tests	**Evaluate renal function**
Lipid Profile	**Monitor cardiovascular risk markers**
Total Testosterone	**Evaluate endocrine status**
Estradiol (E2)	**Assess hormonal balance**
PSA (When Appropriate)	**Monitor prostate health**

STORAGE & STABILITY

* Store according to official product labeling.
* Protect from excessive heat and direct sunlight.
* Do not freeze.
* Maintain original packaging integrity.
* Keep away from children.
* Inspect packaging before use.

PRODUCT AUTHENTICITY

Every genuine NEXON product should include appropriate quality verification features.

Authentication may include:

* Batch number tracking
* Manufacturing information
* Expiration date verification
* QR authentication system
* Authorized distribution verification

NEXON emphasizes transparency, traceability, and product quality control.

FREQUENTLY ASKED QUESTIONS

What is Trenbolone Hexahydrobenzylcarbonate?
Trenbolone Hexahydrobenzylcarbonate, historically known as Parabolan, is a long-acting esterified form of trenbolone designed to provide sustained hormone availability following intramuscular administration.

How is Trenbolone Hexahydrobenzylcarbonate different from Trenbolone Acetate?
Trenbolone Hexahydrobenzylcarbonate provides slower absorption and a longer duration of activity, whereas Trenbolone Acetate provides faster hormone availability and a shorter pharmacokinetic profile.

Does Trenbolone Hexahydrobenzylcarbonate convert to estrogen?
No. Trenbolone is not considered a clinically significant substrate for aromatase and therefore does not undergo meaningful conversion to estradiol.

Why are trenbolone esters used?
Esterification modifies the pharmacokinetic profile of trenbolone by controlling hormone release and influencing the duration of biological activity.

Was Parabolan approved for human medical use?
Yes. Unlike most trenbolone esters, Trenbolone Hexahydrobenzylcarbonate (Parabolan) was previously approved for limited human therapeutic use in certain countries before being withdrawn from the market.

NEXON QUALITY COMMITMENT

NEXON is committed to maintaining high standards of manufacturing quality, product consistency, traceability, and scientific transparency.

Through quality control systems, authentication procedures, and responsible information sharing, NEXON aims to provide reliable pharmaceutical products and educational resources for healthcare professionals and informed users.

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